

## **ABSTRACT**

A needle guard mechanism for sewing machines aims at stabilizing needles during lowering for stitching operation to prevent needle wobbling caused by high speed motion thereby  
5 to avoid the needles from breaking or skipping. The needle guard mechanism adopts an independent design to adjust needle lowering and lifting time separately. The mechanism includes a needle guard and a transmission mechanism. The needle guard consists of a movable member, a front needle  
10 guard straddled on the movable member and a rear needle guard fastened to the movable member. The transmission mechanism provides a force to drive the movable member to move reciprocally so that the front needle guard swings in the opposite direction against the reciprocal motion thereby it  
15 moves close to the rear needle guard to hold the lowering needles steadily to prevent needle wobbling.